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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,618	10/09/2001	Alon Atsmon	100/02143	4568

7590 10/07/2004

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EXAMINER

BAROT, BHARAT

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/806,618	Applicant(s) ATSMON ET AL.	
	Examiner Bharat N Barot	Art Unit 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-154 is/are pending in the application.
- 4a) Of the above claim(s) 60-86 and 104-144 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-59, 87-103 and 145-154 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>07/28/2004</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-16, 25-59, 87-103, and 145-154 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morris et al (U.S. Patent No. 5,764,900) in view of August et al (U.S. Patent No. 6,389,055).

3. As to claims 1-8 and 11, Morris et al teach a method of communicating with an electronic device/computer, comprising: providing a computer having an audible sound receiving and generating sub-system including a microphone and a loudspeaker; transmitting from a source at least one first acoustic signal, encoded with information, to the computer; receiving the at least one signal by the microphone, to be detected by the computer; and transmitting to the source, using the loudspeaker, at least a second acoustic signal, encoded with information, in response with the detected signal (abstract and summary of the invention; figures 1-2; column 1 lines 7-45; and column 2 line 30 to column 3 line 52).

However, Morris et al do not teach that the acoustic signal comprises an ultrasonic signal; the electronic device comprises a telephone; and forwarding an indication of the information to a remote electronic device/computer, over an Internet.

August et al teach that the acoustic signal comprises an ultrasonic signal; the electronic device comprises a telephone; and forwarding an indication of the information to a remote electronic device/computer, over an Internet (abstract; figures 4-5; column 5 lines 24-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of August et al stated above in the method of Morris et al for communicating with an electronic device/computer because it would have maximized the utilization of the electronic device and improved efficient usage of the electronic device.

4. As to claims 9-10, Morris et al teach that the indication comprises a sound file and a data file (figures 2-3 and 5; column 3 line 28 to column 4 line 21; and column 5 line 18 to column 6 line 51).

5. As to claims 12-14, Morris et al teach that the computer comprises a personal digital assistant, a portable computer, and a desktop computer (figures 1-2; and column 3 lines 28-52).

6. As to claims 15-16, August et al teach that the processing the at least one sound by the computer, wherein processing comprises extracting the encoded information (abstract; summary of the invention; column 4 lines 13-35; and column 5 lines 10-17).

7. As to claims 25-27, August et al teach that the processing comprises emulating a touch screen using the received at least one sound and a pointing device using the received at least one sound; and controlling at least one action of a toy, responsive to the received at least one sound (column 6 lines 29-53; and column 10 line 65 to column 11 line 10).

8. As to claims 28-31, August et al teach that the electronic device comprises a wireless communication device, a computer peripheral comprises a printer, and a toy (figure 4; and column 5 lines 18-35).

9. As to claims 32-33, August et al teach that the information comprises programming information and music (figure 3; and column 4 line 40 to column 5 line 17).

10. As to claims 34-35, August et al teach that the source comprises a toy and the information comprises stored player input (column 10 line 65 to column 11 line 10).

11. As to claims 36-40, August et al teach that the source comprises a smart card, a wireless communication device, a computer, and a computer peripheral; and the information comprises personal information (figure 4; and column 5 lines 18-35).

12. As to claims 41-42, Morris et al teach that the logging into a computer system responsive to the at least transmitted signal; and transmitting at least a second acoustical signal responsive to the received at least one signal (figures 1-2; and column 2 line 30 to column 3 line 52).

13. As to claims 43-45, August et al teach that the acoustic signal comprises human audible sound, wherein the sound has a main frequency over 10kHz and infra-sonic (figures 4-5; and column 5 lines 17 to column 6 line 11).

14. As to claims 46-51, August et al teach that the information is encoded using below human-threshold amplitude signals and variations; the sound is generated at a frequency outside a normal operating frequency for the sound subsystem; the sound subsystem is designed for generating musical sounds; and the sound subsystem comprises a sound card and a SoundBlaster compatible sound card (figures 4-5 and 9; column 5 line 17 to column 10 line 64; and column 14 lines 33-59).

15. As to claims 52-59, August et al teach that the sound sub-system is designed for audible sound communication with a human operator (figures 1 and 3; and column 3 lines 19-28); and the ultrasonic signal has a verity of frequency (column 3 line 59 to column 4 line 35; and column 5 lines 44-51).

16. As to claims 87-96, they are also rejected for the same reasons set forth to rejecting claims 1-8 and 11 above. Additionally, August et al teach a method of determining a status of an electronic device (column 9 lines 5-42).

17. As to claims 97-99, Morris et al teach that the programming an existing device to generate the signals using an existing speaker which, when the device was designed, was not designated for communication with a second device, wherein the programming comprises software programming in which only memory storage locations are modified and hardware programming in which electronic circuitry of the device is modified (abstract; summary of the invention; figures 1-2; and column 2 line 30 to column 3 line 52).

18. As to claims 100-103, Morris et al teach that the electronic device comprises a computer, a network hub, a network switch, and network router (figure 1; and column 2 line 30 to column 3 line 28).

19. As to claims 145-154, August et al teach that the source comprises a telephone and the information comprises e-commerce information (figure 1 and 4; column 2 line 66 to column 3 line 58; and column 5 lines 17-35).

20. Claims 17-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morris et al (U.S. Patent No. 5,764,900) in view of August et al (U.S. Patent No. 6,389,055) as applied to claims 1 and 15 above, and further in view of Foxlin (U.S. Patent No. 6,176,837).

21. As to claims 17-24, neither Morris et al nor August et al teach that the processing comprises determining a distance between the microphone and the source, movement of the microphone relative to the source wherein the movement comprises angular movement and translation, a spatial position of the microphone relative to the source wherein the spatial position is a one/two/three dimensional spatial position.

Foxlin teaches that the processing comprises determining a distance between the microphone and the source, movement of the microphone relative to the source wherein the movement comprises angular movement and translation, a spatial position of the microphone relative to the source wherein the spatial position is a one/two/three dimensional spatial position (abstract; summary of the invention; figures 1-4; and column 3 line 25 to column 5 line 44).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Foxlin stated above in the method of Morris et al for communicating with an electronic device/computer because it would have maximized the utilization of the electronic device and improved efficient usage of the electronic device.

Additional Reference

22. The examiner as of general interest cites the following reference.

- a. Fong et al, U.S. Patent No. 6,182,044.

Contact Information

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bharat Barot whose telephone number is (703) 305-4092. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alam, Hosain, can be reached at (703) 308-6662. A central official fax number is (703) 872-9306.

Any inquiry of general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 305-3900.

Patent Examiner Bharat Barot

Art Unit 2155

September 27, 2004


BHARAT BAROT
PRIMARY EXAMINER